


University-wide Data Management Services: Cross-campus Collaborations at Indiana University

Digital Library Brown Bag Series | March 6, 2013



#dlbbspring2013

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Overview

- Who we are, what we do, and why we're here
- The changing research landscape
- How librarians fit into the picture
- Addressing data management needs
 - Describing data
 - Defining standards
 - Intellectual property and rights management
 - Licensing
 - Archiving and preservation
- Discussion

Who we are

Stacy Konkiel, MIS, MLS

Science Data Management Librarian

Background in Institutional Repositories and Scientific Publishing

Scholarly Communication Department, part of IUScholarWorks team

Heather Coates, MS, MLS

Digital Scholarship & Data Management Librarian

Background in psychology research and healthcare, certified clinical research coordinator (SoCRA)

Data Services Program, Program of Digital Scholarship, University Library

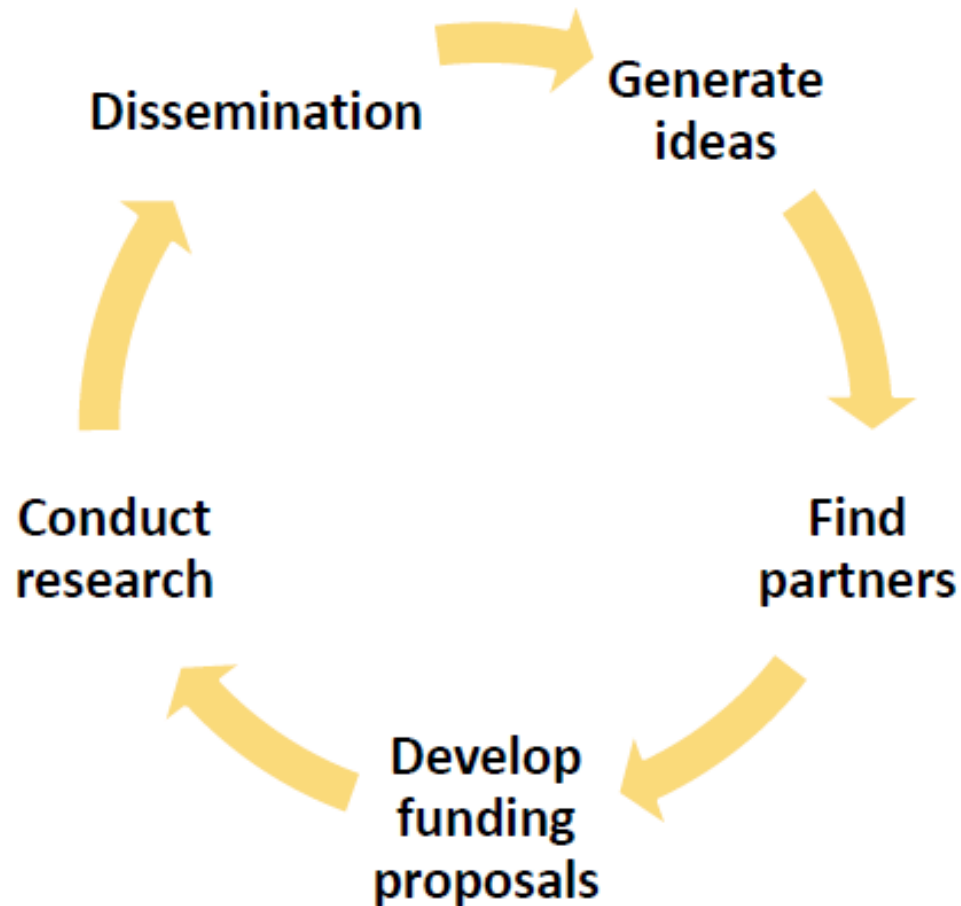
The big question

Source: <http://bit.ly/LAdtnC>



The changing research landscape

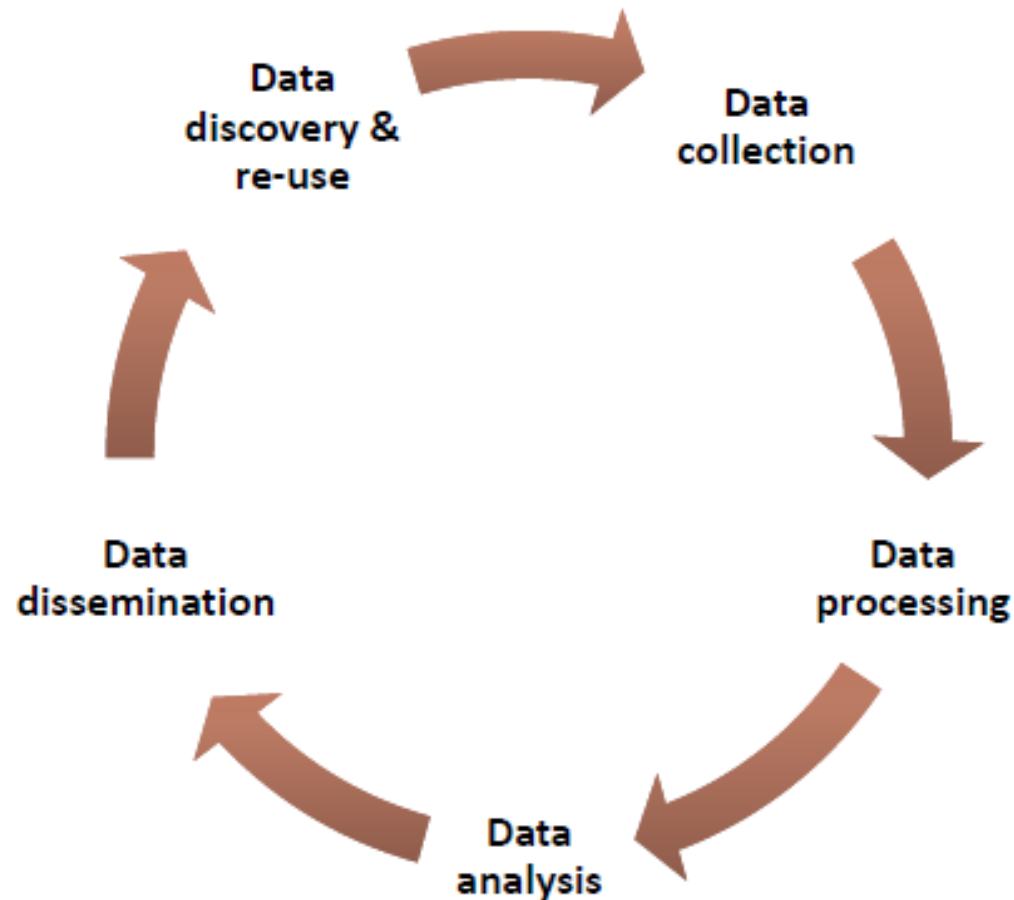
Research Life Cycle



(Coates, 2012)

The changing research landscape

Data life cycle



(Coates, 2012)

The changing research landscape

- Digital data vs. analog data
- The data deluge
- All are struggling to make sense of this flood of data
- The case for Open Data
- The Academy responds

How librarians fit into the picture

- Trust
- Interdisciplinary/Collaborative
- Existing Infrastructure
 - Preservation
 - Digital Content

How librarians fit into the picture at Indiana University

Libraries

Research Life Cycle

Libraries

Open access &
e-Publishing
Data citation
altmetrics

Dissemination

Generate
ideas

Locating data

OVPR/OVCR

Libraries

Project
documentation
& metadata

Conduct
research

**OVPR/OVCR/
ORA**

Find
partners

Building
research
networks

Implementing data
management plans

Develop
funding
proposals

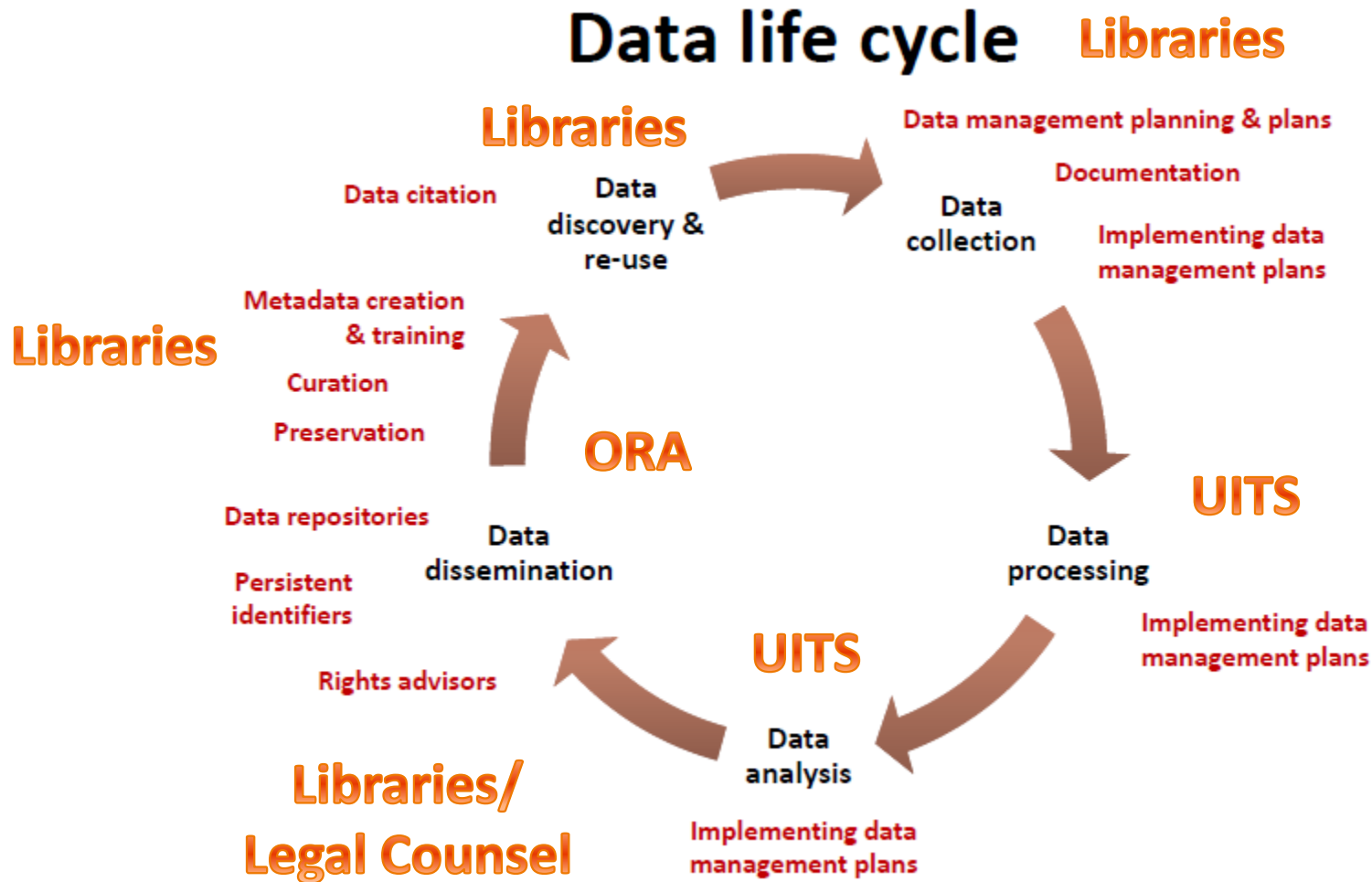
Libraries

Data management
planning & plans

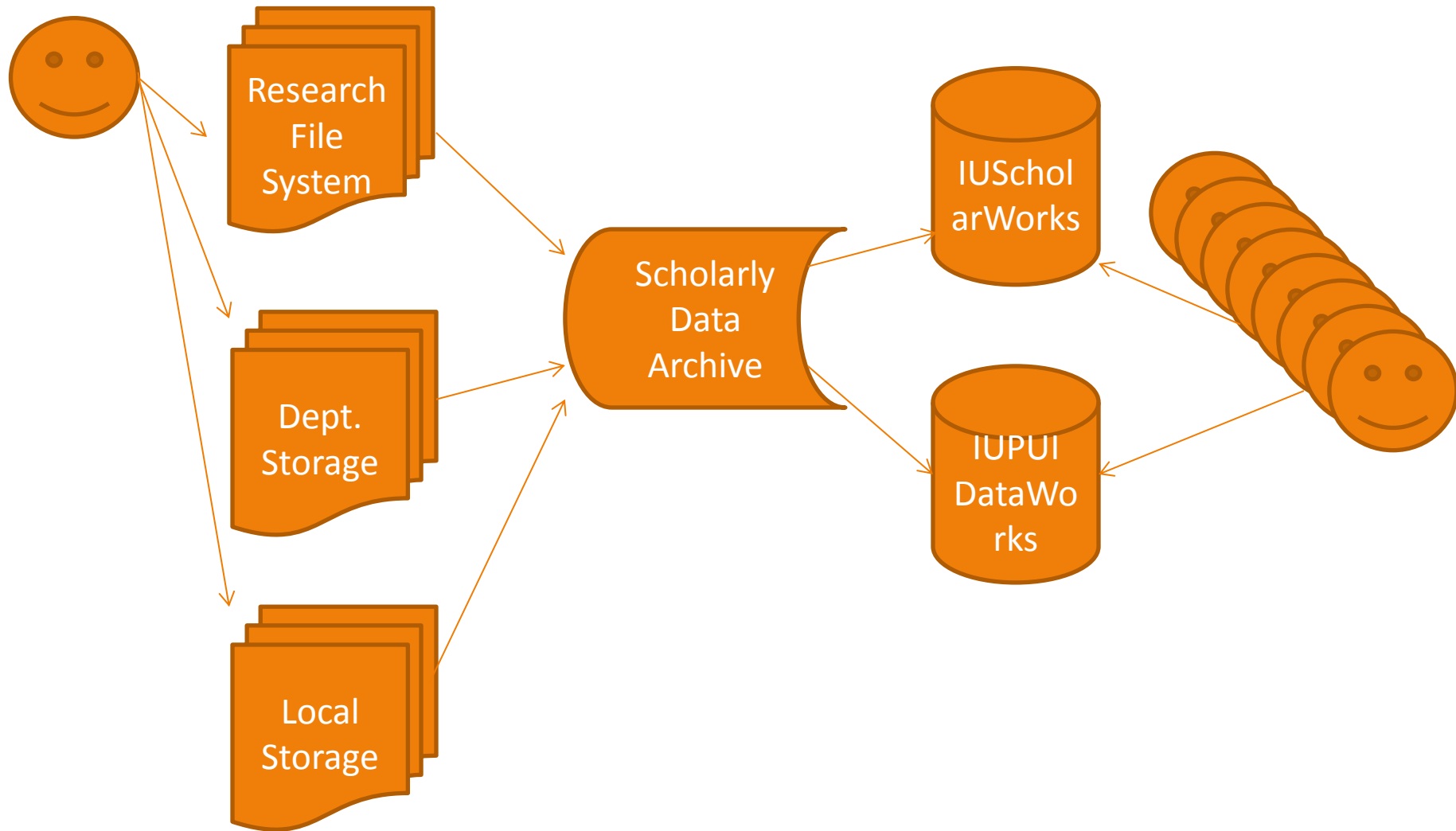
**Libraries/
Legal Counsel**

Rights advisors

How librarians fit into the picture at Indiana University



University Cyberinfrastructure



University-wide Resources

- DMPTool

The screenshot displays the DMPTool website interface. At the top, the logo features a green 3D cube icon next to the text 'DMPTool' and the tagline 'Guidance and Resources for your Data Management Plan'. Navigation links include 'Contact Us', 'Manage Profile', and 'Logout', with a note 'You are logged in as Stacy Konkiet'. A secondary navigation bar contains 'Home', 'About DMP Tool', 'DMP News', 'My Plans', 'Funder Requirements', and 'Help'. The main content area is titled 'NSF-GEN: Generic: 4. Policies for re-use, redistribution' and includes a sub-header 'Policies and provisions for re-use, re-distribution, and the production of derivatives.' On the left, a 'Progress' sidebar lists five steps: 1. Types of data produced, 2. Data and metadata standards, 3. Policies for access and sharing, 4. Policies for re-use, redistribution (highlighted), and 5. Plans for archiving & preservation. The central workspace contains a 'Suggested answer text' box with the text: 'Under the terms of the Creative Commons Zero Universal 1.0 Public Domain Dedication* (CC0 1.0; http://creativecommons.org/publicdomain/zero/1.0/), users may share, create, and/or adapt these data/databases.' Below this is a 'Help' section titled 'Additional help for: Indiana University' with text about attribution rights and links to CC0 and ODC-BY licenses. A rich text editor toolbar is visible at the bottom of the workspace. On the right, a 'Resources' section lists links for 'Indiana University IU Bloomington Data Management Service', 'IUPUI Data Services Program', 'General NSF Data Sharing Policy', 'NSF Data Management Plan Requirements', and 'DataONE Best Practice: Identify Data Sensitivity'. A 'Recent DMP News' sidebar on the far right contains several news items, including 'Positions available: DMPTool software engineer', 'DMPTool Partners Awarded Funding for enhancement', and 'DMPTool maintenance extended, Saturday Jan 12'.

- NSF Template and boilerplate text
- UITS Cyberinfrastructure

Data Services @ IUB

- Workshops
 - NSF Data Management Plan requirements
 - Research Computing Resources
- 1:1 Consultations
 - NSF Data Management Plan reviews
 - Tools & strategies
- IUScholarWorks repository
 - Data curation & long-term preservation
- IU Libraries-Bloomington Data Management Guide
<http://libraries.iub.edu/data>

Data Services @ IUPUI

- Workshops
 - NSF Data Management Plan requirement
 - Data management to ensure scientific integrity & data validity (RCR)
 - Tools & strategies
- 1:1 Consultations
 - NSF Data Management Plan requirement
 - Tools & strategies
- IUPUIDataWorks repository
 - Long-term preservation
 - Sharing & citation
- IUPUI Data Management Subject Guide (in development)

Data management plan support

- Describing data
- Defining standards
- Intellectual property and rights management
- Licensing
- Archiving and preservation

**It's about supporting research, at all phases of the life cycle*

Describing data @ IUB

“the types of data, samples, physical collections, software, curriculum materials, and other materials to be produced in the course of the project” - NSF DMP Guidelines

- Ultimately managed by PIs, labs, departmental grant writers
- Consultations helps researchers understand and identify relevant info to include

Describing data @ IUPUI

“the types of data, samples, physical collections, software, curriculum materials, and other materials to be produced in the course of the project” - NSF DMP Guidelines

- Workshops and individual consultations to help researchers describe their data
- Consultations serve two purposes: 1) articulate implicit assumptions and practices, 2) increase awareness of relevant issues
- Data & Subject Librarian are interviewing researchers to learn more about data generated @ IUPUI

Defining standards @ IUB

“the standards to be used for data and metadata format and content (where existing standards are absent or deemed inadequate, this should be documented along with any proposed solutions or remedies)” – NSF DMP Guidelines

- Science Data Management Librarian consults with researchers on existing standards
- Where there are no existing standards: Metadata Analyst

Defining standards @ IUPUI

“the standards to be used for data and metadata format and content (where existing standards are absent or deemed inadequate, this should be documented along with any proposed solutions or remedies)” – NSF DMP Guidelines

- Data Librarian provides direction to existing standards during individual consultations
- Data management subject guide is in development
- When no standards exist, consult other librarians, direct them to colleagues or subject repositories in their discipline

Intellectual property and rights management @ IUB

“policies for access and sharing including provisions for appropriate protection of privacy, confidentiality, security, intellectual property, or other rights or requirements” – NSF DMP Guidelines

- Copyright & Intellectual Property Librarian
- SDA
 - HIPAA-aligned
 - Considered secure “dark storage”
- IUScholarWorks
 - Policy to only take de-identified data, onus on researchers
 - Embargoes possible—all data eventually Open Data
- Work with researchers to understand benefits of Open Data

Intellectual property @ IUPUI

“policies for access and sharing including provisions for appropriate protection of privacy, confidentiality, security, intellectual property, or other rights or requirements” – NSF DMP Guidelines

- Digital Scholarship Team assists researchers in making informed decisions about privacy/confidentiality and IP issues, sharing mechanisms and policies, re-use, and related issues
- IUPUIScholarWorks & IUPUIDataWorks
- Committed to public access with limited embargo periods and restrictions
- No HIPAA data, only de-identified (PI responsibility)

Licensing @ IUB

“policies and provisions for re-use, re-distribution, and the production of derivatives” – NSF DMP Guidelines

- Copyright & Intellectual Property Librarian
- Science Data Management Librarian

Licensing @ IUPUI

“policies and provisions for re-use, re-distribution, and the production of derivatives” – NSF DMP Guidelines

- Digital Scholarship Team
 - Team Leader
 - Data Librarian
 - Scholarly Communications Librarian
 - Digital Projects Coordinator
 - Subject Librarians with DST roles

Archiving & Preservation @ IUB

“plans for archiving data, samples, and other research products, and for preservation of access to them” – NSF DMP Guidelines

- Storage and preservation consultations
 - Local or external repositories
- Joint digital preservation statement (in development)
- Working with IUPUI and UITS to develop shared preservation platform
- “High touch” data curation service (in development)

Archiving & Preservation @ IUPUI

“plans for archiving data, samples, and other research products, and for preservation of access to them” – NSF DMP Guidelines

- Assists researchers in making informed decisions about archiving and preserving data using IU and subject-specific cyberinfrastructure
- Supporting researchers in navigating the research support systems and services
- Working with IUB and UITS to develop shared preservation platform
- Pilot data curation projects (in development)

Regional Campus Support

- Data management consultants on other IU campuses <http://go.iu.edu/6ZN>
- Shared storage and preservation infrastructure (for most part)
- DMPTool/NSF boilerplate text

Discussion

- Data stewardship is being discussed as an institutional responsibility given the mobility of the research workforce. How does the Library partner with other institutional stakeholders?
- How do data that are different from primarily textual and image scholarly products challenge our current systems and services?
- How are we talking about data services in the broader context of scholarly communications, including open access and altmetrics?